

In item 2 on page 3 of the above-identified final Office action, claims 1 to 7, 11, and 12 have been rejected as being fully anticipated by either Parker (U.S. 648,632) or Schmidberger (DE 1 004 207) under 35 U.S.C. § 102.

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and, therefore, the claims have not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful. Claim 1 calls for, *inter alia*, a heat insulated wall, including:

an evacuatable heat insulating material;

two outer covering layers having contours and disposed at a distance from one another, the two outer covering layers connected to one another in a vacuum-tight manner by a connecting profile running along the contours, the two outer covering layers together with the connecting profile enclosing an intermediate space that can be evacuated and filled with the evacuatable heat insulating material, at least one of the two outer covering layers having an aperture formed therein; and

a tube section including two end sections, one of the two end sections having a circumferentially positioned flange-shaped expanded and flattened region fixed in a vacuum-tight manner in the aperture of the at least one of the two outer covering layers and being formed to compensate for positional imprecisions between the aperture and the tube section.

In lines 6 to 8 of item 1 on page 2 of the above-identified final Office action, the Examiner remarks about the tolerance equalization feature of the invention of the instant application. In order to even more clearly define the invention of the instant application, applicants have added this feature to claim 1. Support may be found from page 4, lines 10 to 25, of the specification of the instant application.

Nowhere does Parker or Schmidberger disclose or suggest the tolerance equalization feature of the invention of the instant application. Thus, claim 1 is believed patentable over the prior art.

In fact, applicants believe that the Parker suspension eyelet 5 cannot be used for compensating for positional imprecisions between the cover surfaces. Figs. 2 to 4 of Parker appear to

show a shoulder jack that is installed with its shoulder stops in an external depression provided in the cover surfaces 2, 3. Therefore, the eyelet 5 is fixed in a given position and does not have a centering effect. Even if a person skilled in the art of thermally insulating walls would consider the pastry goods board of Parker relevant to the invention of the instant application -- which applicants believe to the contrary -- that person would not derive from Parker leading a shoulder jack through the two cover layers without installing the eyelet in a depression of the two cover layers for accepting the shoulder. Regardless, Parker's construction is entirely unsuitable for compensating tolerances between the two cover layers. Therefore, applicants respectfully believe Parker cannot anticipate the invention of the instant application.

On pages 2 to 3 of the above-identified final Office action, the Examiner states that there is no "factual evidence" indicating that the Parker construction is unsuitable for a thermally insulating wall based on vacuum insulation technology. Applicants respectfully traverse. First, Parker is concerned with a composite board or panel formed by two thin metallic outer layers and a filling "formed of strawboard, pasteboard, or analogous yielding absorbent material so as to provide a cushion within the board." Parker at col. 1, lines 49 to 52. In other words, the filling is pressboard or cardboard. Leaving aside the issue of the

joining technique for the two thin-walled metallic outer layers (see Parker at Figs. 1 to 4), one having ordinary skill in the art knows that the Parker filling is entirely unsuitable for maintaining a durable vacuum -- a vacuum that is required by claim 1 of the instant application.

Furthermore, the technique for joining the two outer layers is self-explanatory. Namely, one having ordinary skill in the art knows that joining two outer layers with folds is not suitable for thermally insulating walls based on vacuum technology. This is true because an ability to form an air-impermeable drain is inherently alien to the Parker technique.

In contrast to the Examiner's statements, applicants respectfully believe that Parker does not disclose the invention of the instant application because claim 1 encompasses a thermally insulating wall that includes the connecting profile and the evacuatable thermal insulation material. Parker shows neither a connecting element nor an evacuatable thermally insulating material. Nor does Parker even relate to a thermally insulating wall.

In lines 13 to 14 of item 1 on page 2 of the above-identified final Office action, the Examiner indicates a "belief" that in the applicants' "device the flanged tube is relevant to the support of two panels too." This belief is incorrect. First, the pipe section with its flange-like corners does not serve

for supporting the two outer layers. What serves to mutually support the two cover layers in the evacuated state are, on one hand, a connecting profile that is disposed in the peripheral region of the cover layers and that connects the two cover layers to each other, and, on the other hand, the evacuable thermal insulation material disposed between the cover layers. Such a configuration guarantees the support necessary for the two cover layers against one another for thermally insulating walls based on vacuum insulation technology. Second, support using the flanged tube would have undesirable effects. Partial supporting with a pipe portion having flange-like corners leads to problematic dips between the support points in an evacuated thermally insulated wall. Such dips are unacceptable in thermally insulating walls.

This subject leads directly to the discussion of Schmidberger. Schmidberger does not contain a thermally insulating wall based on vacuum insulation technology. As such, the support measure 10 applied between the Schmidberger cover layers is entirely realistic for that application. It is precisely this type of support that is used for conventional modes of insulation such as disclosed by Schmidberger. However, one having ordinary skill in the art of vacuum-insulating heat blocking walls knows that such support is totally unusable because the high-performance heat blockage that is provided by vacuum insulation is entirely eliminated by the heat bridges -

- arising as a consequence of the separating support pieces  
10. Such a distinction demonstrates that, contrary to the  
view expressed by the Examiner, the two types of heat  
insulation, namely, that proposed by Schmidberger and that  
according to the invention of the instant application, are in  
no way comparable and are incompatible.

At best, applicants respectfully believe that any teaching,  
suggestion, or incentive possibly derived from Parker or  
Schmidberger is only present with hindsight judgment in view  
of the instant application. "It is impermissible, however,  
simply to engage in a hindsight reconstruction of the claimed  
invention, using the applicant's structure as a template and  
selecting elements from references to fill the gaps. . . .  
The references **themselves** must provide some teaching whereby  
the applicant's combination would have been obvious." In re  
Gorman, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (emphasis  
added). Here, no such teachings are present in any of the  
cited references.

In lines 1 to 4 on page 3 of the above-identified final Office  
action, the Examiner views the "vacuum-insulation technology  
as a subdivision of insulation technology as a whole and  
therefore within the preview of one having ordinary skill in  
the art of insulation technology." Applicants respectfully  
traverse this view. Heat blockage based on vacuum-insulation

technology is not a subgroup of conventional heat insulation technology. Conventional technology almost exclusively uses foaming heat blocking materials, such as polyurethane or the like. Thus, such technology calls upon the knowledge of a chemist. Vacuum-insulation technology, in contrast, is concerned mainly with free pathways of air molecules. Consequently, the knowledge of a physicist prevails. By definition, the different types of problems arising in these two technologies (which run parallel to each other rather than in serial) require the use of different experts for overcoming the problems separately conditioned by each of the two different technologies.

For all of the above reasons, neither Parker nor Schmidberger anticipate the invention of the instant application.

In item 5 on page 4 of the above-identified Office action, claims 8 to 10 have been rejected as being obvious over Schmidberger in view of Babbitt (U.S. 1,984,007) under 35 U.S.C. § 103.

Insofar as claims 8 to 10 are ultimately dependent upon claim 1, and due to the fact that claim 1 is allowable, claims 8 to 10 are believed to be allowable as well.

Further, the arguments above with respect to Schmidberger are incorporated herein by reference. Applicants respectfully believe that the reason why Schmidberger is supposedly suitable for vacuum heat insulation technology is unclear to the extent that the construction of the Schmidberger refrigeration housing and the materials used for the connection are not suitable for maintaining a lasting vacuum between the cover surfaces. Therefore, the thermal insulating power of an evacuated wall that has been constructed in this manner would wane rather rapidly.

Moreover, Babbitt does not suggest the compensating feature of the invention of the instant application. Babbitt's cup-shaped member 19 centers itself within the opening in the cover surface using a conical casing wall 19. See Babbitt at Fig. 3. The flange-type corner at the free end of the conical cladding wall only serves as a depth stop. Thus, it does not disclose or suggest the compensation feature of the invention of the instant application.

As an aside, the Babbitt features also serve to counter the argument, according to the view expressed by the Examiner, that the suspension eyelet of Parker, which was published thirty-two (32) years before the filing date of Babbitt, is relevant to the construction of the invention of the instant application. As the construction of the Babbitt pipe shows,



Parker obviously remained entirely outside all consideration with respect to the construction of thermally insulating walls, in general, and, specifically, in Babbitt.

Applicants respectfully believe that any teaching, suggestion, or incentive possibly derived from Schmidberger or Babbitt is only present with hindsight judgment in view of the instant application. As set forth above, such judgment is impermissible.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1, as amended. Claim 1 is, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claim 1.

In view of the foregoing, reconsideration and allowance of claims 1 to 12 are solicited.


In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out. In the alternative, the entry of the amendment is requested, as it is believed to place the application in

better condition for appeal, without requiring extension of the field of search.

Petition for extension is herewith made. The extension fee for response within a period of one (1) month pursuant to Section 1.136(a) in the amount of \$110.00 in accordance with Section 1.17 is enclosed herewith.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

  
For Applicants

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CLM:cgm

September 19, 2000

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